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Province of Manitoba

DEPARTMENT OF MINES AND NATURAL RESOURCES

MINES BRANCH

PUBLICATION 57 - 3

BIBLIOGRAPHY

of

GEOLOGY OF THE PRECAMBRIAN AREA

OF MANITOBA

1950 - 1957

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Compiled by

G. S. BARRY

WINNIPEG

1959



Province of Manitoba

DEPARTMENT OF MINES AND NATURAL RESOURCES

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PREFACE

This bibliography is intended to serve as a supplement to publication 51-1 which contained references on Manitoba's Precambrian up to 1950. The present list covers the period 1950 to 1957.

The bibliography is divided into four parts. Part I contains references indexed according to the names of authors, listed in alphabetical order. The full titles and references are given in this section. In Part II references are indexed according to subject and only the author's name and date of publication are given for each subject reference. The full reference may be obtained by referring back to Part I. Part III lists references according to geographical location, followed by general topics; as in Part II only the author's name and date is recorded in Part III.

Lists of geophysical and geological maps, published from 1951 to 1957 by the Manitoba Mines Branch and the Geological Survey of Canada, are contained in Part IV.

A number of publications and reports written prior to 1950 but omitted from the earlier bibliography, 51-1, have been included in the present bibliography. These have been placed in the appropriate places in Parts I, II, and III, and are listed separately in the Appendix.

Grateful acknowledgement is made to the libraries and geological departments of Canadian universities for their assistance in providing titles of theses dealing with Manitoba. Of particular help was the information provided by the Geological Survey of Canada.

It would be appreciated if any errors or omissions are brought to the attention of the Mines Branch.

LIST OF ABBREVIATIONS

The following list gives both abbreviated citation and full name of periodicals and serials that have been cited in this publication:

- A.I.M.E. Trans. - American Institute of Mining and Metallurgical Engineers Transactions. New York.
- Am. Jour. Sci. - American Journal of Science. New Haven, Pa.
- Am. Mineralogist - American Mineralogist. Ann Arbor, Mich.
- C.I.M.M. Trans. - Canadian Institute of Mining and Metallurgy Transactions. Montreal.
- C.M.M. Bull. - Canadian Mining and Metallurgical Bulletin. Montreal.
- Can. Min. Jour. - Canadian Mining Journal. Gardenvale, Quebec.
- Econ. Geol. - Economic Geology. Urbana, Ill.
- Eng. and Min. Jour. - Engineering and Mining Journal. New York.
- Geol. Assoc. Can. Proc. - Geological Association of Canada Proceedings. Ontario.
- Geol. Soc. America Bull.; Interim Proc.; Mem.; Proc. - Geological Society of America Bulletin; Interim Proceedings; Memoirs; Proceedings. New York.
- Geol. Surv. Canada, Bull.; Geophysics Paper; Map; Mem.; Paper - Geological Survey of Canada; Geophysics Paper; Map; Memoir; Paper. Ottawa.
- Jour. Geol. - Journal of Geology. Chicago.
- Manitoba Mines Branch Publ. - Manitoba Mines Branch Publication. Winnipeg, Manitoba.
- Mines Mag. - Mines Magazine. Golden. Colo.
- Min. Eng. - Mining Engineering. New York.
- Natl. Mus. Can. Bull. - National Museum of Canada Bulletin. Ottawa.
- Precambrian - The Precambrian, Winnipeg, Manitoba.
- Roy. Soc. Can. Proc.; Trans.; Special Publ. - Royal Society of Canada Proceedings; Transactions; Special Publication. Ottawa.
- Western Miner. - Western Miner. Vancouver, British Columbia.

PART I

REFERENCES INDEXED BY AUTHOR

- Allen, C. M.
 (1950): A Study of the Effect of Soil Forming Processes on Serpentine Rocks at Clangula Lake, Manitoba.
 Unpublished M. Sc. Thesis, University of Manitoba.
 (1953): Geology of the Western Part of the Bear Lake Area, Oxford Lake Mining Division.
 Manitoba Mines Branch Publ. 52-4.
 (1954): Geology of the Cotton Lake Area, Cross Lake Mining Division.
 Manitoba Mines Branch Publ. 53-2.
- Anderson, G. M.
 (1956): Regional Structure in the Precambrian of Manitoba.
 Unpublished M. Sc. Thesis, University of Toronto.
- Antrobus, E. S. A.
 (1949): Lime-rich Metamorphic Rocks, Cree Lake, Manitoba.
 Unpublished M. Sc. Thesis, McGill University, Que.
- Ashton, H. F.
 (1949): Spectrographic and Microscopic Investigation of Some Saskatchewan and Manitoba Pyrrhotites.
 Unpublished M. Sc. Thesis, University of Saskatchewan.
- Beer, H. L.
 (1951): Beneficiation of a Canadian Spodumene Ore from Cat Lake District, Manitoba.
 Precambrian, vol. 24, No. 6, pp. 8-11.
- Bell, Hon. F. C.
 (1957): Manitoba Reports Active Year.
 Western Miner, vol. 30, No. 4, pp. 110-114.
- Binda, L. S.
 (1953): Petrology of the "Archean" Sediments in the West Hawk Lake Area.
 Unpublished M. Sc. Thesis, University of Manitoba.
- Black, P. T.
 (1949): A Study of Archean Sediments of the Canadian Shield.
 Unpublished M. Sc. Thesis, McGill University.
- Brown, Eldon L.
 (1955): (and Ruttan, G. D.)
 The Sherritt Gordon Lynn Lake Project. Discovery and Financing by Eldon L. Brown.
 Geology of Lynn Lake by G. D. Ruttan.
 C.I.M.M. Bull. vol. 48, No. 518, pp. 335-348.
- Brownell, G. M.
 (1954): (and Schaller, R. D. R.)
 Prospecting Local Areas with the Airborne Scintillometer.
 Precambrian, vol. 27, No. 3, pp. 6-11.
- Byers, A. R.
 (1954): Geology of Wildnest and Amisk Lake Area.
 Precambrian, Vol. 27, No. 5, pp. 18-20.

- (1956): Geochemical Investigations in the Flin Flon Area.
Can. Min. Jour. vol. 77, No. 4, pp. 83-86.
- (1957): A Comparison of Geophysical Methods Over Known Conductors
in the Flin Flon Area (Abstract).
Can. Min. Jour. vol. 78, No. 4, p.130.
- Canadian Mining Journal. (All issues):
Provincial Notes:
Mining in Manitoba.
Review of Mining in Manitoba.
Mineral Development in Manitoba.
- (1957): Mammoth Nickel Project in Northern Manitoba.
Can. Min. Jour. vol. 78, No. 1, pp. 68-69.
- Caldwell, C. K.
(1950): A Study of the Sickle Conglomerate with Special Reference to the
Zircon Content.
Unpublished M. Sc. Thesis, University of Manitoba.
- Calich, R.
(1954): A Study of Precambrian Banded Iron Formation.
Unpublished M. Sc. Thesis, University of Manitoba.
- Charlewood, G. H.
(1952): Base Metals in Manitoba.
Precambrian, Vol. 25, No. 4, pp. 14 and 30.
- (1954a): Geology and Mineral Properties of the Lynn Lake Region.
Precambrian, vol. 27, No. 4, pp. 14-15.
- (1954b): Geology of the Lynn Lake Area.
Western Miner, vol. 27, No. 6, pp. 48-51.
- (1957a): Exploration for Metals in Manitoba.
Precambrian, vol. 30, No. 6, pp. 12-14.
- (1957b): Exploration in Manitoba.
Can. Min. Jour. vol. 78, No. 4, pp. 147-148.
- (1957c): (and Davies, J. F.)
Questionable Proterozoic Rocks of Manitoba - Proterozoic in
Canada.
Roy. Soc. Can. Special Publ. No. 2., Editor, J. E. Gill.
- Cole, Geo. E.
Western Miner. (All issues).
Under Titles:
Progress in Manitoba.
Mineral Production in Manitoba.
Manitoba and Saskatchewan.
Mining in Manitoba.
- (1951a): Activity in Manitoba - Neepawa Salt Plant Sold.
Western Miner, vol. 24, No. 5.
- (1951b): The Flin Flon Mine, Northern Manitoba.
Precambrian, vol. 24, No. 3, p. 8.
- (1951c): The Lynn Lake Project.
Western Miner, vol. 24, No. 8, pp. 50-51.
- (1952): Progress at Lynn Lake.
Western Miner, vol. 25, No. 7, p. 51.

- Cole, Geo. E. (continued)
- (1953a): Manitoba's Industrial Minerals.
Western Miner, vol. 26, No. 11, pp. 122-127.
 - (1953b): Mystery Lake Nickel Showing.
Western Miner, vol. 26, No. 6, pp. 118-122.
 - (1956): Nickel Industry for Northern Manitoba.
Western Miner, vol. 29, No. 12, pp. 62-63.
- Cumming, G. L.
- (1955): (and Wilson, J. T., Farquhar, R. M., Russell, R. D.):
Some Dates and Subdivisions of the Canadian Shield.
Geol. Surv., Canada, Proc. vol. 7, pt. 2.
- Davies, J. F.
- (1950): Geology of the Wanipigow River Area, Rice Lake Mining
Division.
Manitoba Mines Branch Publ. 49-3.
 - (1951): Geology of the Manigotagan - Rice River Area, Rice Lake Mining
Division.
Manitoba Mines Branch Publ. 50-2.
 - (1952): Geology of the Oiseau (Bird) River Area, Lac du Bonnet Mining
Division.
Manitoba Mines Branch Publ. 51-3.
 - (1953): Geology and Gold Deposits of the Southern Rice Lake Area, Rice
Lake Mining Division.
Manitoba Mines Branch Publ. 52-1.
 - (1954): Geology of the West Hawk Lake - Falcon Lake Area, Lac du Bon-
net Mining Division.
Manitoba Mines Branch Publ. 53-4.
 - (1955a): Copper-Nickel Deposits of the Bird River Area.
Precambrian, vol. 28, No. 3, pp. 6-8.
also: Western Miner, vol. 28, No. 8, pp. 42-44.
 - (1955b): Geology and Mineral Deposits of the Bird Lake Area.
Manitoba Mines Branch Publ. 54-1.
 - (1956a): Geology of the Booster Lake Area, Lac du Bonnet Mining Division.
Manitoba Mines Branch Publ. 55-1.
 - (1956b): Manitoba Lithium Deposits (Cat Lake-Winnipeg River Area).
Can. Min. Jour. vol. 77, No. 4, pp. 78-79.
also: Precambrian, vol. 29, No. 6, pp. 46-50.
Western Miner, vol. 29, No. 9, pp. 35-37.
 - (1957a): Geology of the Winnipeg River Area (Shatford Lake-Ryerson Lake),
Lake du Bonnet Mining Division.
Manitoba Mines Branch Publ. 56-1.
 - (1957b): (See Charlewood - 1957c).
- Dawson, A. S.
- (1952): Geology of the Partridge Crop Lake Area, Cross Lake Mining
Division.
Manitoba Mines Branch Publ. 41-1.
- de Wet, J. P.
- (1951a): Mining in Manitoba - 1950.
Can. Min. Jour. vol. 72, No. 2, pp. 77G - 80G.
 - (1951b): Snow Lake, Manitoba . . . A Model Industrial Townsite.
Precambrian, vol. 24, No. 3, pp. 14-19.

de Wet, J. P. (continued)

- (1952): Review of Mining In Manitoba during 1951.
Can. Min. Jour. vol. 73, No. 2, pp. 84-90.
- (1953a): Mineral Development in Manitoba in 1952.
Can. Min. Jour. vol. 74, No. 2, pp. 89-93.
- (1953b): Sherridon to Lynn Lake.
Can. Min. Jour. vol. 74, No. 12, pp. 63-64.
- (1954): Mineral Development in Manitoba in 1953.
Can. Min. Jour. vol. 75, No. 2, pp. 86-91.
- (1955): Mineral Development in Manitoba - 1954.
Can. Min. Jour. vol. 76, No. 2, pp. 80-83.

Dornian, N.

- (1950): A Study of the Sulphides and Oxides of the Nickel-Copper Deposits of Lynn Lake, Manitoba.
Unpublished M. Sc. Thesis, University of Manitoba.

Eakins, P. R.

- (1949): Geology of the Jeep Mine, Rice Lake Area, South-eastern Manitoba.
Unpublished M. Sc. Thesis, McGill University.

Farquhar, R. M.

- (1955a): (See Cumming - 1955).
- (1955b): (See Mawdsley - 1955).
- (1956): (See Wilson - 1956).

Fawley, A. P.

- (1953): Geology of the Lasthope Lake Area, Granville Lake Mining Division.
Manitoba Mines Branch Publ. 49-5.

Forward, F. A.

- (1953): Ammonia Pressure Leach Process for Recovering Ni, Cu, Co, from Sherritt Gordon Nickel Sulphide Concentrate.
C. M. M. Bull. vol. 46, pp. 677-684.

Gass, W. J.

- (1957): Pegmatites of the Winnipeg River Area, Manitoba.
Unpublished M. Sc. Thesis, Dalhousie University.

Gast, P. W.

- (1956): Absolute Age Determinations from Early Precambrian Rocks.
Unpublished Ph. D. Thesis, Columbia University.

Gentleman, D.

- (1945): The Flin Flon Area, Manitoba.
Unpublished B. Sc. Thesis, University of Western Ontario.

Geological Survey of Canada

- (1957): List of Elementary Textbooks in Geology and Mineralogy.
Geol. Surv., Canada, Misc. G. 44.
- (1957): A List of Recently Published Memoirs, Preliminary Papers and Maps of Manitoba.
Geol. Surv., Canada, Misc. G. 55.
- (1957): Geology and Economic Minerals of Canada.
Geol. Surv., Canada, Econ. Geol. Series No. 1, 4th Edit.

Gill, J. C.

- (1951a): Geology of the Mystery Lake Area, Cross Lake Mining Division.
Manitoba Mines Branch Publ. 50-4.
- (1951b): Geology of the Waskaiowaka Lake Area, Cross Lake Mining Division.
Manitoba Mines Branch Publ. 50-5.

- Gill, J. C. (continued)
- (1954): The Geology of the Waskaiowaka Lake and Mystery Lake Areas, Northern Manitoba.
Unpublished M. A. Thesis, Queen's University.
- Gill, J. E.
- (1952): Diabase Dykes in the Canadian Shield.
Roy. Soc. Can. Trans. vol. 46, Series 3, sec. 4, pp. 25-29.
- (1955): Precambrian Nomenclature in Canada.
Roy. Soc. Can. Trans. vol. 49, Series 3, sec. 3, pp. 25-29.
- Griffith, J. W.
- (1956): A Bibliography on the Occurrence of Uranium in Canada and Related Subjects.
Geol. Surv., Canada, Paper 56-5.
- Harrison, J. M.
- (1941): Metamorphism and Origin of a Part of the Wasekwan Series.
Unpublished M. A. Thesis, Queen's University.
- (1951a): Possible Major Structural Control of Ore Deposits, Flin Flon-Snow Lake Mineral Belt, Manitoba.
C. M. M. Bull., vol. 44, No. 465, pp. 5-9.
- (1951b): Precambrian Correlation and Nomenclature, and Problems of the Kiseeynew Gneisses, in Manitoba.
Geol. Surv., Canada, Bull. No. 20.
- (1951c): Preliminary Map, Sipiwesk, Manitoba.
Geol. Surv., Canada, Paper 51-2.
- Hawley, J. B.
- (1953): (and Rimaite, Y.):
Platinum Metals in Canada Ores.
Am. Mineralogist, vol. 38, Nos. 5 and 6, pp. 471-472.
- Heinrich, E. Wm.
- (1953): Zoning in Pegmatite Districts.
Am. Mineralogist, vol. 38, Nos. 1 and 2, pp. 73-74.
- Heywood, W. W.
- (1957): Ledge Lake Area, Manitoba and Saskatchewan.
Geol. Surv., Canada, Map 24 - 1957. Scale 1 in. = 1,000 ft.
- House, R. D.
- (1955): Radioactivity and Geology of the Falcon Lake Stock, Southern Manitoba.
Unpublished M. Sc. Thesis, Northwestern University.
- Hunter, H. E.
- (1951): Igneous Rocks in the Lake St. Martin Area, Manitoba.
Manitoba Mines Branch Publ. 50-10.
- (1952): Geology of the Melvin Lake Area, Granville Lake Mining Division.
Manitoba Mines Branch Publ. 51-5.
- (1953): Geology of the McKnight Lake Area, Granville Lake Mining Division.
Manitoba Mines Branch Publ. 52-3.
- Hutt, G. M.
- (1953): Strategic and Industrial Mineral Production in Manitoba.
Western Miner, vol. 26, No. 12, pp. 42-43.
- Johnson, F. E.
- (1953): Development of Huge Copper-Nickel Deposit to Benefit Manitoba.
Precambrian, vol. 26, No. 8, p. 34.

- Johnson, F.
 (1956): Manitoba Mining Review - 1955.
 Can. Min. Jour. vol. 77, No. 2, pp. 92-93.
 (1957): Manitoba Mining Review.
 Can. Min. Jour. vol. 78, No. 2, pp. 101-102.
- Kalliokoski, J.
 (1952a): Interpretation of the Structural Geology of the Sherridon - Flin Flon Region, Manitoba.
 Geol. Surv., Canada, Bull. 25.
 (1952b): Weldon Bay Map Area, Manitoba.
 Geol. Surv., Canada, Mem. 270.
- Keating, L. F.
 (1953): (and Berry, L. G.)
 Pisanite from Flin Flon, Manitoba.
 Am. Mineralogist, vol. 38, Nos. 5 and 6, pp. 501-505.
- Kilburn, L. C.
 (1956): Geology of the MacBride Lake Area, Granville Lake Mining Division.
 Manitoba Mines Branch Publ. 55-2.
- Kirkland, S. J. T.
 (1956): Structures of the Flin Flon - Weetago Bay Area, Northern Saskatchewan.
 Unpublished Ph. D. Thesis, Queen's University.
- Krause, C. A.
 (1950): Distribution of Radioactivity in the MacKenzie Gold Eagle Stock and a Batholith in the Rice Lake Area.
 Unpublished B. A. Sc. Thesis, University of Toronto.
- Lang, A. H.
 (1952): Canadian Deposits of Uranium and Thorium.
 Geol. Surv., Canada, Econ. Geol. Series, No. 16, pp. 116-117.
 (1954): A List of Publications on Prospecting in Canada and Related Subjects (with Explanatory notes).
 Geol. Surv., Canada Paper 54-1.
 (1956): Prospecting in Canada.
 Geol. Surv., Canada, Econ. Geol. Series No. 7, 3rd. Edit.
- La Prairie, L.
 (1951): The Stauroilite Schist in Snow Lake - Herb Lake Area.
 Unpublished B. A. Sc. Thesis, University of Toronto.
- L'Esperance, R. L.
 A Study of Diabase Dykes of the Canadian Shield.
 Unpublished M. Sc. Thesis, McGill University.
- Leveille, J. H.
 (1950): Precambrian Volcanic and Sedimentary Occurrences in Manitoba and Saskatchewan.
 Unpublished B. Sc. Thesis, University of British Columbia.
- Manitoba Chamber of Mines
 (1951): Metal Production Tops Latest Peak and Lynn Lake Copper-Nickel Reserves Grow.
 Precambrian, vol. 24, No. 1, pp. 17-19.
 (1952): Leading Mine Celebrates 21 years of Continuous Production.
 (H. B. - Flin Flon) - Oil Discovered in South-west.
 Precambrian, vol. 25, No. 1, pp. 13-17.

- Mawdsley, J. B.
 (1955): (and Farquhar, R. M.)
 Report of the Committee on Precambrian and Related Dating.
 Roy. Soc. Can. Trans. vol. 49, Series 3, Section 4, pp. 37-45.
- McAuley, J. S.
 (1950): A Partial Chemical Investigation of the East End of the San Antonio Intrusive.
 Unpublished B. A. Sc. Thesis, University of Toronto.
- McDiarmid, Hon. J. S.
 (1952): Mining In Manitoba.
 Western Miner, vol. 25, No. 4, pp. 80-82.
- McGlynn, J. C.
 (1954): Heming Lake and Elbow Lake, Manitoba.
 Geol. Surv., Canada, Paper 54-14.
- McKerlie, D. F.
 (1957): Geology of the Oxford Lake and Carrot River Areas, Northern Manitoba.
 Unpublished B. Sc. Thesis, University of Western Ontario.
- Meinert, R. J.
 (1957): Island Lake Series (Precambrian), East Island Lake, Manitoba.
 Unpublished M. Sc. Thesis, University of Cincinnati.
- Michalkow, A.
 (1954): Structural Geology and Petrology of the Lily Pond Area, Manitoba.
 Unpublished M. Sc. Thesis, University of Manitoba.
- Milligan, G. C.
 (1951a): Bibliography of Geology of the Precambrian Area of Manitoba to 1950.
 Manitoba Mines Branch Publ. 51-1.
 (1951b): Geology of the Beau-Cache Lake Area, Granville Lake Mining Division.
 Manitoba Mines Branch Publ. 50-8.
 (1952a): Geology of the Laurie Lake Area, Granville Lake Mining Division.
 Manitoba Mines Branch Publ. 50-7.
 (1952b): Geology of the Utik Lake - Bear Lake Area, Oxford Lake Mining Division.
 Manitoba Mines Branch Publ. 51-4.
 (1953): Geology and Mineral Possibilities of Utik Lake and Adjacent Areas.
 Precambrian, vol. 26, No. 3, p. 21.
 (1954): (and Take, W. F.)
 Geology of the Eastern Bear Lake Area, Oxford Lake Mining Division.
 Manitoba Mines Branch Publ. 53-1.
 (1957): The Geological History of the Lynn Lake Area.
 Can. Min. Jour. vol. 78, No. 7, pp. 75-78.
 Abs: Can. Min. Jour. vol. 78, No. 4, p. 95.
- (The) Mining Magazine - Editorial
 (1957): Manitoba Progress.
 The Mining Magazine, vol. 96, No. 6, pp. 341-344.
- Mines and Resources, Canada, Department of,
 (1936): Gold Ore from the Knee Lake Gold Mines Limited, Knee Lake, God's Lake Area.

- Mines and Resources, Canada, Department of, (continued)
 Bureau of Mines Report No. 776,
 Investigations in Ore Dressing and Metallurgy.
- Moorhouse, M. D.
 (1954): (and Shepherd, J. H.).
 Geology of the California Lake Area, Oxford Lake Mining Division.
 Manitoba Mines Branch Publ. 53-3.
- Morgan, J. H.
 (1940): The Application of Accessory Mineral Methods to the Precambrian
 Rocks of the Oxford House Area.
 Unpublished Ph. D. Thesis, University of Wisconsin.
- Mulligan, R.
 (1955): Split Lake, Manitoba.
 Geol. Surv., Canada, Map 10 - 1956. Scale 1 in. = 4 miles.
 (1957a): Lithium Deposits of Manitoba, Ontario and Quebec - 1956.
 Geol. Surv., Canada, Paper 57-3.
 (1957b): Lithium in Canada - Recent Developments and Geological Features.
 Can. Min. Jour. vol. 78, No. 4, pp. 121-125.
- Mullock, J. E.
 (1952): Biogeochemical and Geochemical Research in the Amisk Lake
 and Flin Flon Region.
 Unpublished M. Sc. Thesis, University of Saskatchewan.
- Muter, J. R.
 (1955): (and Drake, R. T., and Nashner, Sydney).
 Sherriitt Gordon Lynn Lake Project:
 Mining at Lynn Lake, by J. R. Muter.
 Milling at Lynn Lake, by R. T. Drake.
 Refining at Fort Saskatchewan by Sydney Nashner.
 C. M. M. Bull. vol. 48, No. 519, pp. 386-410.
- Nethery, W. A.
 (1952): A Study of the Relation between Direction of Late Hydrothermal
 Solutions and Ore Deposition.
 Falcon Lake Stock, Boundary District, Manitoba.
 Unpublished B. A. Sc. Thesis, University of Manitoba.
- Oliver, T. A.
 (1952a): Geology of the Counsell Lake and Wilmot Lake Area,
 Granville Lake Mining Division,
 Manitoba Mines Branch Publ. 50-9.
 (1952b): Geology of the McGavock Lake Area, Manitoba.
 Unpublished Ph. D. Thesis, University of California.
- Osborne, T. C.
 (1949): Petrology and Petrogenesis of Bird River Chromite-bearing Sill.
 Unpublished M. Sc. Thesis, University of Manitoba.
- Podolsky, T.
 (1951): Preliminary Map, Cranberry Portage (East Half), Manitoba.
 Geol. Surv., Canada, Paper 51-17.
 (1957): Cranberry Portage, (West Half), Manitoba.
 Geol. Surv., Canada, Map 26 - 1957. Scale 1 in. = 1 mi.
- Precambrian (All issues)
 Mining - On the Prairies.

Precambrian (continued)

Editorials:

- (1952): Fabulous Flin Flon.
Precambrian, vol. 25, No. 9, pp. 22-25.
- (1953): Lithium in Manitoba. What about it?
Precambrian, vol. 26, No. 1, p. 17.
- (1955a): Large Nickel Area Found by Inco in N. Manitoba.
Precambrian, vol. 28, No. 10, p. 9.
- (1955b): Manitoba Has Busiest of Years.
Precambrian, vol. 28, No. 12, pp. 13-15.
- (1955c): Nearly 4,000,000 Tons of Ore Indicated at Violamac's Manitoba Lithium Property.
Precambrian, vol. 28, No. 10, p. 15.
- (1955d): The Sherritt Gordon Lynn Lake Project.
Precambrian, vol. 28, No. 10, pp. 6-9.
- (1956a): Inco Begins Vast Mining Development in Northern Manitoba.
Precambrian, vol. 29, No. 12, pp. 6-9.
- (1956b): International Nickel May Develop Holdings in Northern Manitoba.
Precambrian, vol. 29, No. 8, p. 14.
- (1957a): Inco's Manitoba, Sudbury Projects in 1956, Biggest Nickel Expansion in History.
Precambrian, vol. 30, No. 2, pp. 58-59.
- (1957b): Moak Lake Program Increasing Tempo.
Precambrian, vol. 30, No. 6, pp. 16-18.
- (1957c): Years of Discovery and Decision in Manitoba.
Precambrian, vol. 30, No. 2, pp. 28-32.

Quinn, H. A.

- (1954): Nelson House, Manitoba.
Geol. Surv., Canada, Paper 54-13.
- (1955a): Knee Lake, Manitoba.
Geol. Surv., Canada, Paper 55-8.
- (1955b): Mineral Prospects of the Knee Lake Map Area, Manitoba.
Precambrian, vol. 28, No. 5, pp. 10-23.
- (1956): Mineral Occurrences between Chipewyan and Herb Lakes, Manitoba.
Precambrian, vol. 29, No. 10, pp. 6-14.
(cont'd) vol. 29, No. 11, pp. 6-12.
(cont'd) vol. 30, No. 1, pp. 28-33.

Robertson, D. S.

- (1951): The Kisseynew Lineament, Northern Manitoba.
Precambrian, vol. 24, No. 5, pp. 8-13.
- (1953): Batty Lake Map Area, Manitoba.
Geol. Surv., Canada, Mem. 271.

Rowe, R. B.

- (1948): The Nickel Copper Deposits of Lynn Lake, Manitoba.
Unpublished M. A. Thesis, University of Toronto.
- (1954): Pegmatitic Lithium Deposits in Canada.
Econ. Geol. vol. 49, No. 5, pp. 501-515.
- (1955): Lithium Deposits of Manitoba.
Geol. Surv., Canada, Paper 55-26.

Russell, G. A.

- (1952a): Chromite: A North American "Have Not?"
Precambrian, vol. 25, No. 3, pp. 8-10.

Russell, G. A. (continued)

(1952b): Geology of the Lily Lake-Kickley Lake Area, Rice Lake Mining Division, Manitoba.

Manitoba Mines Branch Publ. 50-3.

(1952c): Structural Studies of the Long Lake-Halfway Lake Area, Rice Lake Mining Division, Manitoba.

Manitoba Mines Branch. Publ. 49-6.

(1953): A Geological Reconnaissance of the Wolverine and Caribou Rivers, Cross Lake Mining Division.

Manitoba Mines Branch Publ. 52-2.

(1957): Structural Studies, Snow Lake-Herb Lake Area, Herb Lake Mining Division.

Manitoba Mines Branch Publ. 55-3.

Russell, R. D.

(1955): (See Cumming - 1955).

(1956): (See Wilson - 1956).

Ruttan, G. D.

(1955): (See Brown - 1955).

Schaller, R. J. R.

(1954): (See Brownell - 1954).

Seibert, Fred. V.

(1955): Mineral Development in the Prairie Provinces.

C. M. M. Bull., vol. 48, No. 521, pp. 534-540.

Shepherd, J. D.

(1934): Preliminary Report. Bear Lake Investigation.

Manitoba Mines Branch Bull.

Shepherd, J. H.

(1954a): A Study of Certain Rocks of the California Lake Map Area, Northern Manitoba.

Unpublished M. Sc. Thesis University of Manitoba.

(1954b): (See Moorhouse - 1954).

Springer, G. D.

(1952): Geology of the Rennie-West Hawk Lake Area, Lac du Bonnet Mining Division.

Manitoba Mines Branch Publ. 50-6.

Stanton, M. S.

(1941): Heavy Accessory Mineral Study Applied to Local Precambrian Correlation.

Unpublished M. A. Thesis, Queen's University.

Take, W. F.

(1954): (See Milligan - 1954).

Taylor, W. L. W.

(1950): Copper-Nickel Sulphide Deposits of the Werner Lake, Ontario and Bird River, Manitoba areas.

Unpublished M. Sc. Thesis, McGill University.

Troop, A. G.

(1950): The Geology of the Ogama-Rockland Gold Mine.

Unpublished M. Sc. Thesis, University of Manitoba.

Waldron, Howard, L.

(1951): Sherritt Gordon Develops Lynn Lake Nickel-Copper.

Eng. and Min. Jour. vol. 152, No. 11, pp. 72-78.

Western Miner. (All Issues, 1951-57, see under titles and author).

- a) Geo. E. Cole.
- b) Progress in Manitoba.
- c) Mineral Production in Manitoba.
- d) Manitoba and Saskatchewan.
- e) Mining in Manitoba.

Wilson, J. T.

(1955): (See Cumming - 1955).

Wilson, J. T., Russell, R. D. and Farquhar, R. M.

(1956): Economic Significance of Basement Subdivision and Structures in Canada.

C. M. M. Bull. vol. 49, No. 532, pp. 550-558.

Wright, G. M.

(1953): Uhlman Lake Map Area.

Geol. Surv., Canada, Paper 53-12.

Wright, J. F.

(1925): Geology and Mineral Deposits of the East-Central Manitoba Mining District.

C. I. M. M. Trans. vol. 28, pp. 311-329.

PART II
REFERENCES INDEXED BY SUBJECT
ECONOMIC GEOLOGY

Miscellaneous

Regional: Anderson, 1956; Harrison, 1951a, 1951b; Quinn, 1956;
Robertson, 1951.

Financing:

Lynn Lake: Precambrian, 1955d; Brown, 1955.

Granite:

Lake St. Martin: Hunter, 1951.

West Hawk Lake: Springer, 1952; Cole, 1953a.

Lithium Beneficiation: Beer, 1951.

Mining:

Lynn Lake: Muter, et al, 1955; Precambrian, 1955d.

Prospecting: Brownell, 1954; Lang, 1956; Charlewood, 1957a.

Refining:

Lynn Lake Ores: Muter, et al, 1955; Precambrian, 1955d.

Asbestos

Garner Lake: Russell, 1952b.

Beryllium

Bernic Lake: Davies, 1955b, 1957a.

Cat Lake: Davies, 1956b.

Glenn: Springer, 1952.

Greer Lake: Davies, 1957a.

Herb Lake: Russell, 1957.

Missipisew River: Quinn, 1956.

Shatford Lake: Davies, 1957.

Winnipeg River: Davies, 1957.

Chromium

Chromite, general: Russell, 1952a.

Bird River: Davies, 1952.

Bird Lake: Davies, 1955b.

Cobalt

Lynn Lake: Dornian, 1950; Charlewood, 1952; Brown, et al, 1955.

Southern Indian Lake: Quinn, 1956.

Copper

Anson Lake: Davies, 1952.

Bird Lake: Davies, 1955b.

Bird River: Taylor, 1950; Davies, 1955a.

Buffalo Lake: Precambrian, 1955b.
 Crowduck Bay: Precambrian, 1955b.
 Cuprus Mines: de Wet, 1951a.
 Elken Lake: Robertson, 1953.
 Gordon Lake: Johnson, 1953.
 Herb Lake: Russell, 1957.
 Kickley Lake: Russell, 1952b.
 Lynn Lake: Rowe, 1948; Dornian, 1950; de Wet, 1951a; Waldron, 1951;
 Charlewood, 1954a; 1954b; Brown, et al, 1955.
 McLaren Creek: Quinn, 1956.
 Miller Lake: Bell, 1957.
 Moak Lake: Precambrian, 1955b.
 Morton Lake: Precambrian, 1955b.
 Mystery Lake: Cole, 1953b; Precambrian, 1955b; Quinn, 1956.
 Osborne Lake: Precambrian, 1955b; Quinn, 1956; Bell, 1957; Russell, 1957.
 Ospwagan (Pipe) Lake: Dawson, 1952.
 Partridge Crop Lake: Dawson, 1952.
 Schist Lake: de Wet, 1951a.
 Southern Indian Lake: Quinn, 1956.
 Utik Lake: Milligan, 1952b, Quinn, 1955b.
 Wilmot Lake: Oliver, 1952a.

Gold

Alberts Lake: Kalliokoski, 1952b.
 Assean Lake: Gill, 1951b.
 Beresford Lake: Davies, 1953.
 Central Manitoba Mines: Russell, 1952c.
 Century Mines: McGlynn, 1954.
 Diana Mine: Russell, 1952b.
 Eastern Bear Lake: Milligan, 1954.
 Elbow Lake: McGlynn, 1954.
 Eldorado Mines: Russell, 1952c.
 Evans Lake: Robertson, 1953.
 Falcon Lake: Davies, 1954.
 Falnora Gold Mines: Davies, 1954.
 Fay Lake: McGlynn, 1954.
 Gencona Mines: Davies, 1953.
 Gold Island Mining Company: Davies, 1953.
 Gold Lake Mines: Davies, 1953.
 Gold Pan Mines: Davies, 1953.
 Great Island: Precambrian, 1955b.
 Gunnar Mine: Russell, 1952c.
 Herblet Lake: Quinn, 1956.
 Homestake Explorations: Davies, 1954.
 Island Lake: Meinert, 1957.
 Karsakuwigamask Lake: Quinn, 1956.
 Knee Lake: Quinn, 1955a; 1955b.
 Lasthope Lake: Fawley, 1952.

Laurie Lake: Milligan, 1952a.
Lynn Lake: Charlewood, 1954a; Brown et al, 1955.
Manigotagan River: Davies, 1951.
Oro Grande: Russell, 1952c.
Ogama - Rockland Mine: Troop, 1950; de Wet, 1951a; Russell, 1952c.
Packsack Mines: Davies, 1953.
Portage Avenue Gold Mines: Davies, 1953.
Rice Lake (Southern): Davies, 1953.
San Antonio Mines: de Wet, 1951a.
Snow Lake: de Wet, 1951a; Precambrian, 1955b; Quinn, 1956; Russell, 1957.
South Indian Lake: Quinn, 1956.
Split Lake: Gill, 1951b.
Star Lake Gold Mines: Davies, 1954.
Utik Lake: Milligan, 1952b.
Wanipigow Lake: Davies, 1953.
West Hawk Lake: Springer, 1952.
Wolf Rapids: Quinn, 1956.

Silver

Fox River: Quinn, 1955b.
Mystery Lake: Dawson, 1952; Quinn, 1956.
Osborne Lake: Quinn, 1956.
West Hawk Lake: Springer, 1952.

Iron

Bigstone River: Quinn, 1955b.
Manigotagan River: Davies, 1951.
Utik River: Quinn, 1955b.

Lead

Evans Lake: Robertson, 1953.
Mystery Lake: Gill, 1951a.
Osborne Lake: Quinn, 1956.
Setting Lake: Quinn, 1956.

Lithium

General: Precambrian, 1953; Rowe, 1954, 1955; Davies, 1956b;
Mulligan, 1957a, 1957b.
Bernic Lake: Davies, 1955b, 1956b; Gass, 1957.
Cat Lake: Precambrian, 1955b; Bell, 1957; Davies, 1956b; Mulligan, 1957a,
1957b; Rowe, 1954, 1955.
Crowduck Bay: Rowe, 1955; Precambrian, 1955b; Mulligan, 1957b.
East Braintree: Rowe, 1954, 1955; Mulligan, 1957a, 1957b.
Glenn: Springer, 1952.
Grass River: Quinn, 1956.
Greer Lake: Davies, 1957a.
Herb Lake: Rowe, 1954, 1955; Mulligan, 1957a, 1957b; Russell, 1957.
Missipisew River: Quinn, 1956.
Montgary Mines: Bell, 1957; Davies, 1957a.
Violamac Mines: Precambrian, 1955c.

West Hawk Lake: Rowe, 1954, 1955; Mulligan, 1957a, 1957b.
Winnipeg River: Rowe, 1954, 1955; Davies, 1956b; Gass, 1957; Mulligan,
1957a, 1957b.

Molybdenum

Falcon Lake: Springer, 1952.
Footprint Lake: Wright, 1953.
Partridge Crop Lake: Dawson, 1952.
Wintering Lake: Dawson, 1952.
Wolf Rapids: Quinn, 1956.

Nickel

Alberts Lake: de Wet, 1951a.
Assean Lake: Gill, 1951b.
Bird Lake: Davies, 1955b.
Bird River: Taylor, 1950; Davies, 1955a.
Crowduck Bay: Precambrian, 1955b.
Cuthbert Lake: Dawson, 1952; Quinn, 1956.
Gordon Lake: Johnson, 1953.
Grass River: Quinn, 1956.
Herb Lake: de Wet, 1951a; Russell, 1957.
Island Lake: Meinert, 1957.
Lynn Lake: Rowe, 1948; Dornian, 1950; de Wet, 1951a; Waldron, 1951;
Charlewood, 1954a, 1954b; Brown, et al, 1955.
McLaren Creek: Quinn, 1956.
Melvin Lake: Quinn, 1956.
Moak Lake: Precambrian, 1955b; Cole, 1956; Quinn, 1956.
Mystery Lake: de Wet, 1951a; Gill, 1951a; Harrison, 1951c; Cole, 1953b;
Precambrian, 1955b; Quinn, 1956.
Ospwagan (Pipe) Lake: Dawson, 1952.
Partridge Crop Lake: Dawson, 1952.
Southern Indian Lake: Quinn, 1956.
Thompson Lake: de Wet, 1951a.
Thompson Orebody: Quinn, 1956.
West Hawk Lake: Springer, 1952.
Wintering Lake: Dawson, 1952.

Sulphides

Aileen Lake: Davies, 1957a.
Barrington Lake: Quinn, 1956.
Batty Lake: Robertson, 1957a.
Bernic Lake: Davies, 1957.
Big Sand Lake: Quinn, 1956.
Bird River: Davies, 1952.
Brostrom Lake: Quinn, 1956.
Counsell Lake: Oliver, 1952a.
Eastern Bear Lake: Milligan, 1954.
Falcon Lake: Davies, 1954.
Fay Lake: McGlynn, 1954.
Fish Lake: Quinn, 1956.

Five Mile Lake: Quinn, 1956.
 Fold Lake: Quinn, 1956.
 Footprint Lake: Quinn, 1956.
 Fox River: Quinn, 1955a, 1955b.
 Harding Lake: Quinn, 1956.
 Herb Lake: Russell, 1957.
 High Hill Lake: Quinn, 1955b.
 James Lake: Quinn, 1956.
 Joey Lake: Quinn, 1956.
 Karsakuwigamak Lake: Wright, 1953.
 Kay Lake: McGlynn, 1954.
 Kickley Lake: Russell, 1952b.
 Knee Lake: Quinn, 1955b.
 Landing Lake: Quinn, 1956.
 Leftrock Lake: Quinn, 1956.
 Lily Lake: Russell, 1952b.
 Long Lake: Quinn, 1956.
 Loon Narrows: Quinn, 1956.
 Lynn Lake: Dornian, 1950.
 MacBen Lake: Quinn, 1956.
 MacBride Lake: Quinn, 1956.
 Melvin Lake: Hunter, 1952.
 Naosap Lake: Kalliokoski, 1952b.
 Nelson House: Quinn, 1954, 1956.
 Nelson Lake: Quinn, 1956.
 Nickel Lake: Quinn, 1956.
 Nokomis River: Robertson, 1953.
 Opegano Lake: Quinn, 1956.
 Ospwagan Lake: Quinn, 1954.
 Rat River: Quinn, 1956.
 Rusty Lake: Quinn, 1956.
 Saw Lake: Quinn, 1956.
 Saw Bill Lake: Quinn, 1956.
 Setting Lake: Quinn, 1954, 1956.
 Shatford Lake: Davies, 1957a.
 Snow Lake: Russell, 1957.
 South Indian Lake: Quinn, 1956.
 Star Lake: Davies, 1954.
 Semple Lake: Quinn, 1955b.
 Threepoint Lake: Quinn, 1956.
 Tow Lake: Wuinn, 1956.
 Upper Ospwagan Lake: Quinn, 1956.
 Utik Lake: Milligan, 1952b; Quinn, 1955a, 1955b.
 Vamp Lake: McGlynn, 1954.
 Walton Lake: Robertson, 1953.
 Webb Lake: McGlynn, 1954.
 Weldon Narrows: Kalliokoski, 1952b.
 West Hawk Lake: Davies, 1954.
 Wilmot Lake: Oliver, 1952a.
 Winnipeg River: Davies, 1957a.

Wintering Lake: Quinn, 1956.
Wuskwatin Lake: Quinn, 1956.

Tin

Bernic Lake: Davies, 1955b.
Rush Lake: Davies, 1955b.
Shatford Lake: Davies, 1957a.
West Hawk Lake: Springer, 1952.

Tungsten

Barren Lake: Davies, 1954.
Falcon Lake: Springer, 1952; Davies, 1954.
Herblet Lake: Quinn, 1956.
Snow Lake: Russell, 1957.

Uraninite and Radioactive Minerals

Radioactive Minerals:

Falcon Lake: House, 1955.
Herblet Lake: Russell, 1957.
Laurie Lake: Milligan, 1952a.
Uraninite: Huron Pegmatite: Davies, 1957a.
Uranium: Manigotogan Lake: Precambrian, 1955b.
Star Lake: Lang, 1952.
West Hawk Lake: Springer, 1952.
Winnipeg River: Lang, 1952.

Zinc

Chisel Lake: Bell, 1957.
Cuprus Mines: de Wet, 1951a.
Elken Lake: Robertson, 1953.
Lynn Lake: Dornian, 1950; Charlewood, 1954a; Brown, et al, 1955.
Mystery Lake: Gill, 1951a.
Osborne Lake: Precambrian, 1955b; Quinn, 1956; Bell, 1957; Russell, 1957.
Schist Lake: de Wet, 1951a.

HISTORICAL GEOLOGY

Precambrian Correlation: Cumming, G. L. et al, 1955; Gill, 1955.
Stratigraphy: Russell, 1957.

MINERALOGY

Mineral Occurrences: Geol. Surv., Canada, Map 900A.
Accessory Minerals: Oxford House; Morgan, 1940.
Anthophyllite: Elken Lake; Robertson, 1953.
Beryl and Associated Minerals: Davies, 1957a.
Heavy Accessory Minerals: Stanton, 1941; Dornian, 1950.
Lepidolite (Sr/Rb & K₄₀/A₄₀): Cumming, G. L. et al, 1955.
Lithium Minerals: Davies, 1955b, 1957a.
Micas In Pegmatites: Davies, 1957a.
Minerals in Pegmatites: Davies, 1955b, 1957a.
Pyrrhotite Studies: Ashton, 1949.

Rose Quartz: Birse Lake; Davies, 1956a.
Sulphides: Lynn Lake; Dornian, 1950.
Staurolite: La Prairie, 1951.
Zircons in Sickie Conglomerate: Caldwell, 1950.
Zoning in Pegmatites: Heinrich, 1953.

PETROLOGY

Bird River Chromite: Osborne, 1949.
California Lake Area: Shepherd, 1954a.
Granite: Kalliokoski, 1952b.
Falcon Lake Stock: House, 1955.
Island Lake Series: Meinert, 1957.
McGavock Lake: Oliver, 1952b.
Kisseynew Gneiss: Kalliokoski, 1952b.
Lily Pond Area: Michalkow, 1954.
Metamorphism: Batty Lake; Robertson, 1953.
 Cree Lake; Antrobus, 1949.
 Wasekwan Series; Harrison, 1941.
 Weldon Bay; Kalliokoski, 1952b.
San Antonio Intrusive: McAuley, 1950.
Sickie Conglomerate: Caldwell, 1950.
West Hawk Lake: Binda, 1953.

STRUCTURAL GEOLOGY

Regional: Anderson, 1956; Harrison, 1951b; Wilson, et al, 1956.
Falcon Lake Stock: House, 1955.
Flin Flon Area: Kalliokoski, 1952a; Kirkland, 1956.
Kisseynew Gneisses: Anderson, 1956; Harrison, 1951b; Kalliokoski, 1952a,
 1952b; Robertson, 1953.
Kisseynew Lineament: Robertson, 1951; Harrison, 1951a.
Lily Pond Area: Michalkow, 1954.
Long Lake-Halfway Lake: Russell, 1952c.
Lynn Lake Mine: Brown, et al, 1955.
Rice Lake Group: Russell, 1952b.
Snow Lake-Herb Lake: Russell, 1957.
Weldon Bay: Kalliokoski, 1952b.

MISCELLANEOUS

Bibliography of Geology of the Precambrian Area of Manitoba to 1950:
 Milligan, 1951a.
Bibliography of the Occurrence of Uranium in Canada: Griffin, 1956.
List of Elementary Text Books in Geology and Mineralogy: Geol. Surv. Canada,
 1957.
List of Recently Published Memoirs, Preliminary Papers and Maps of Manitoba:
 Geol. Surv., Canada, 1957.
Geochemistry: Flin Flon; Byers, 1956; Mulloc, 1952.
Geological Age: Charlewood and Davies, 1957c; Cumming, G. L. et al, 1955;
 Gast, 1956; Harrison, 1951b; Mawdsley and Farquhar, 1955; Wilson
 et al, 1956.
Granitization Studies: Waskaiowaka Lake; Gill, 1955b.

Heavy Mineral Studies: Stanton, 1941.
 Hydrothermal Solutions: Falcon Stock; Netherly, 1952.
 Origin of Sulphide Deposits: Bird Lake; Davies, 1955b.

PART III
REFERENCES INDEXED BY LOCATION
GENERAL

Regional: Anderson, 1956; Lang, 1956; Leveille, 1950; Robertson, 1951;
Quinn, 1956.
Chipewyan to Herb Lake: Quinn, 1956.

ATHAPAPUSKOW MINING DIVISION

General: Harrison, 1951b.
Alberts Lake, Gold: Kalliokoski, 1952b.
Annabelle, General: Robertson, 1951.
Batty Lake, General: Robertson, 1951.
Century Mine: McGlynn, 1954.
Cuprus Mines: de Wet, 1953a.
Cranberry Lake, General: Podolsky, 1951.
Elbow Lake, General: McGlynn, 1954.
Gold: McGlynn, 1954.
Fay Lake, Gold: McGlynn, 1954.
Sulphides: McGlynn, 1954.
Flin Flon, General: Robertson, 1951, 1951b; Kalliokoski, 1952a; Kirkland, 1956.
Mine, General: Cole, 1951b.
Earnings: de Wet, 1952.
Geochemical Investigations: Byers, 1956.
Structure: Anderson, 1956.
Heming Lake, General: McGlynn, 1954.
Kay Lake, Sulphides: McGlynn, 1954.
Kisseynew Lineament: Harrison, 1951a.
Mikanagan Lake, General: Robertson, 1951.
Naosap Lake, Sulphides: Kalliokoski, 1952b.
Sherritt Gordon, General: Kalliokoski, 1952a; de Wet, 1952, 1953a; Muter
et al, 1955.
Vamp Lake, Sulphides: McGlynn, 1954.
Webb Lake, Sulphides: McGlynn, 1954.
Weetago Bay: Kirkland, 1956.
Weldon Bay, General: Robertson, 1951; Kalliokoski, 1952a.
Weldon Narrows, Sulphides: Kalliokoski, 1952b.

CROSS LAKE MINING DIVISION

General: Harrison, 1951b, 1951c; Wright, 1953; Quinn, 1954; Russell, 1953.
Bigstone Lake, General: Quinn, 1955a.
Bigstone River, Iron Formation: Quinn, 1955b.
Brostrom Lake, Sulphides: Quinn, 1956.
California Lake, General: Moorhouse, 1954; Shepherd, 1954a.
Caribou River (and Wolverine), Regional: Russell, 1953.
Cauchon Lake, General: Harrison, 1951c.
Chipewyan Lake, General: Quinn, 1956.
Cotton Lake Area, General: Allen, 1954.
Cuthbert Lake, Nickel: Quinn, 1956.

Cuthbert Lake, Tantalite: Quinn, 1956.
 Fish Lake, Sulphides: Quinn, 1956.
 Five Mile Lake, Sulphides: Quinn, 1956.
 Fold Lake, Sulphides: Quinn, 1956.
 Footprint Lake, Sulphides: Quinn, 1956.
 Molybdenum: Wright, 1953.
 Grass River, Nickel: Quinn, 1956.
 Great Island, Gold: Precambrian, 1955b.
 Harding Lake, Sulphides: Quinn, 1956.
 High Hill Lake, Sulphides: Quinn, 1955b.
 International Nickel Company: Johnson, 1957.
 Joey Lake, Sulphides: Quinn, 1956.
 Karsakuwigamak Lake, Gold: Quinn, 1956.
 Sulphides: Wright, 1953.
 Landing Lake, General: Harrison, 1951c.
 Sulphides: Quinn, 1956.
 Leftrock Lake, Sulphides: Quinn, 1956.
 Long Lake, Sulphides: Quinn, 1956.
 Loon Narrows, Sulphides: Quinn, 1956.
 McLaren Creek, Copper-Nickel: Quinn, 1956.
 Moak Lake, Copper-Nickel: Precambrian, 1955b; Quinn, 1956; Cole, 1956.
 Mystery-Moak Lakes, General: Mining Magazine, 1957.
 Mystery Lake, General: Gill, 1951a, 1954.
 Canadian Nickel Company: Quinn, 1956.
 Nickel-Copper: Gill, 1951a, Cole, 1953a; Precambrian, 1955b;
 Quinn, 1956.
 Lead-Zinc: Gill, 1951a.
 Nickel: Harrison, 1951c.
 Mystery Lake Nickel Mines: Quinn, 1956.
 Silver-bearing galena: Quinn, 1956.
 Nelson House, General: Quinn, 1954.
 Sulphides: Quinn, 1954, 1956.
 Nelson River, General: Harrison, 1951c.
 Opegano Lake, Sulphides: Quinn, 1956.
 Ospwagan Lake, General: Quinn, 1954.
 Nickel and copper: Quinn, 1956.
 Gold and silver: Quinn, 1956.
 Sulphides: Quinn, 1954.
 Paint Lake, General: Harrison, 1951c.
 Partridge Breast Lake, Tourmaline: Quinn, 1956.
 Partridge Crop Lake, General: Harrison, 1951c; Dawson, 1952.
 Copper and nickel: Dawson, 1952.
 Gold and silver: Dawson, 1952.
 Molybdenite: Dawson, 1952.
 Pikwitonei Lake, General: Harrison, 1951c.
 Pipe Lake: (See Ospwagan Lake).
 Sawbill Lake, Sulphides: Quinn, 1956.
 Setting Lake, General: Quinn, 1954.
 Lead: Quinn, 1956.
 Sulphides: Quinn, 1954, 1956.

Sipiwesk Lake, General: Harrison, 1951c.
 South Indian Lake, Gold: Quinn, 1956.
 Sulphides: Quinn, 1956.
 Southern Indian Lake, Pegmatites: Quinn, 1956.
 Sulphides: Quinn, 1956.
 Thicket Portage, General: Harrison, 1951b.
 Thompson Orebody: Quinn, 1956.
 Threepoint Lake, Sulphides: Quinn, 1956.
 Uhlman Lake, General: Wright, 1953.
 Upper Oswagan Lake, General: Quinn, 1956.
 Utik Lake, General: Milligan, 1952b; Harrison, 1951c; Quinn, 1955a.
 Sulphides: Milligan, 1952b; Quinn, 1955a.
 Utik River, Iron formation: Quinn, 1955b.
 Sulphides: Quinn, 1955b
 Waskaiowaka Lake, General: Gill, 1951b, 1954.
 Gold: Gill, 1951b.
 Granitization studies: Gill, 1951b.
 Nickel: Gill, 1951b.
 Wintering Lake, General: Harrison, 1951c.
 Sulphides: Quinn, 1956.
 Witchai Lake, General: Harrison, 1951c.
 Wolverine and Caribou Rivers, Regional: Russell, 1953.
 Wuskwatin Lake, Sulphides: Quinn, 1956.

GODS LAKE MINING DIVISION

General: Harrison, 1951b; Quinn, 1955a.
 Fox River, General: Quinn, 1955a.
 Copper-Nickel: Precambrian, 1955b.
 Sulphides: Quinn, 1955a, 1955b.
 Silver, lead: Quinn, 1955b.
 Ultrabasics: Quinn, 1955b.
 Gods Lake, General: Harrison, 1951b.
 Knee Lake, General: Quinn, 1955a, 1955b.
 Gold: Quinn, 1955a.
 Knee Lake Gold Mines: Quinn, 1955b.
 Sulphides: Quinn, 1955b.

GRANVILLE LAKE MINING DIVISION

General: Harrison, 1951b; Wright, 1953.
 Barrington Lake, Sulphides: Quinn, 1956.
 Beau-Cache Lake, Gold: Milligan, 1951b.
 Big Sand Lake, Sulphides: Quinn, 1956.
 Boiley Lake, Gold: Milligan, 1951b.
 Counsell Lake, General: Oliver, 1952a.
 Sulphides: Oliver, 1952a.
 Granville Lake, General: Harrison, 1951b.
 James Lake, Sulphides: Quinn, 1956.
 Lasthope Lake, General: Fawley, 1952.
 Lasthope Lake Gold Mines: Fawley, 1952.

Laurie Lake, General: Milligan, 1952a.
 Caimito Gold Mines: Milligan, 1952a.
 Pegmatites: Milligan, 1952a.

Lynn Lake, General: Harrison, 1951b; Cole, 1951c; Charlewood, 1954a, 1954b; Brown, et al, 1955.
 Cobalt: Charlewood, 1952; Brown, et al, 1955.
 Copper-Nickel: Rowe, 1948; Dornian, 1950; Charlewood, 1954a, 1954b; Brown, et al, 1955.
 Gold: Charlewood, 1954a; Brown, et al, 1955.
 Orebody-Geology: Charlewood, 1954b; Precambrian, 1955d; Brown et al, 1955.
 Production & Reserves: Manitoba Chamber of Mines, 1951.
 Study of Sulphides and Oxides: Dornian, 1950.
 Zinc: Charlewood, 1954a; Brown, et al, 1955.

MacBen Lake, Sulphides: Quinn, 1956.

MacBride Lake, General: Kilburn, 1956.
 Sulphides: Quinn, 1956.

McGavock Lake, General: Oliver, 1952b.

McKnight Lake, General: Hunter, 1953.

Melvin Lake, General: Hunter, 1952.
 Nickel: Quinn, 1956.
 Sulphides: Hunter, 1952.

Nickel Lake, Sulphides: Quinn, 1956.

Rat River, Sulphides: Quinn, 1956.

Rusty Lake, Sulphides: Quinn, 1956.

Sickle Conglomerate: Caldwell, 1950.

Southern Indian Lake, Cobalt: Quinn, 1956.
 Copper: Quinn, 1956.
 Nickel: Quinn, 1956.

Tow Lake, Sulphides: Quinn, 1956.

Wilmot Lake, General: Oliver, 1952a.
 Sulphides: Oliver, 1952a.

HERB LAKE MINING DIVISION

General: Harrison, 1951b; Quinn, 1954.

Batty Lake, Sulphides: Robertson, 1953.

Burntwood River, General: Quinn, 1954.

Chisel Lake, Zinc: Bell, 1957.

Crowduck Bay, Copper-Nickel: Precambrian, 1955b.
 Lithium: Rowe, 1955; Precambrian, 1955b; Mulligan, 1957b.

Elken Lake, Anthophyllite: Robertson, 1953.
 Copper-Zinc: Robertson, 1953.

Evans Lake, Gold: Robertson, 1953.
 Lead: Robertson, 1953.

Gordon Lake, Copper-Nickel: Johnson, 1953.

Grass River, Lithium: Quinn, 1956.

Herb Lake, General: Harrison, 1951b; Quinn, 1956; Russell, 1957.
 Copper-Nickel: Russell, 1957.
 Lithium: Rowe, 1954, 1955; Mulligan, 1957a, 1957b.
 Lithium and Beryllium: Russell, 1957.

Structure: Anderson, 1956.
 Sulphides: Russell, 1957.
 Herblet Lake, General: Russell, 1957.
 Gold: Quinn, 1956.
 Radioactive minerals: Russell, 1957.
 Tungsten: Quinn, 1956.
 Miller Lake, Copper: Bell, 1957.
 Missipisew River, Beryllium: Quinn, 1956.
 Lithium: Quinn, 1956.
 Morton Lake, Copper: Precambrian, 1955b.
 Nelson Lake, Sulphides: Quinn, 1956.
 Nokomis River, Sulphides: Robertson, 1953.
 Osborne Lake, Copper: Quinn, 1956.
 Copper-Zinc: Precambrian, 1955b; Bell, 1957; Russell, 1957.
 Lead: Quinn, 1956.
 Silver: Quinn, 1956.
 Zinc: Quinn, 1956.
 Reed Lake, General: Harrison, 1951b.
 Saw Lake, Sulphides: Quinn, 1956.
 Snow Lake, General: Russell, 1957.
 Gold: de Wet, 1952; Precambrian, 1955b; Quinn, 1956; Russell, 1957.
 Sulphides: Russell, 1957.
 Tungsten: Russell, 1957.
 Walton Lake, Sulphides: Robertson, 1953.
 Wekusko Lake: (See Herb Lake).
 Wolf Rapids, Gold: Quinn, 1956.
 Molybdenum: Quinn, 1956.

ISLAND LAKE MINING DIVISION

General: Harrison, 1951b.
 Island Lake, Gold: Meinert, 1957.
 Island Lake Mines: Meinert, 1957.
 Nickel: Meinert, 1957.

LAC DU BONNET MINING DIVISION

General: Harrison, 1951b.
 Aileen Lake, Sulphides: Davies, 1957a.
 Barren Lake, Scheelite: Davies, 1954.
 Bernic Lake, General: Davies, 1955b.
 Beryllium: Davies, 1955b, 1957a.
 Lithium: Davies, 1955b, 1956b; Gass, 1957.
 Lithium Corp. of Canada: Davies, 1957a.
 Montgary Expl. Ltd.: Davies, 1957a.
 Pegmatites: Davies, 1955b.
 Sulphides: Davies, 1957a.
 Tin: Davies, 1955b.
 Bird Lake, General: Davies, 1955b.
 Copper-Nickel: Davies, 1955b.
 Maskwa Nickel Chrome Mines: Davies, 1955b.
 Pegmatites: Davies, 1955b.
 Petra Chromite Ltd.: Davies, 1955b.

Bird River, General: Davies, 1952.
 Chromite: Davies, 1952.
 Copper-Nickel: Taylor, 1950; Davies, 1955a.
 Pegmatites: Davies, 1952.
 Sulphides: Davies, 1952.
 Booster Lake, General: Davies, 1956a.
 Pegmatites: Davies, 1956a.
 Cat Lake, Lithium: Rowe, 1954, 1955; Precambrian, 1955b; Davies, 1956b;
 Mulligan, 1957a, 1957b.
 Lithium Corporation of Canada: Mulligan, 1957b.
 Violamac Mines: Precambrian, 1955c; Davies, 1956b.
 East Braintree, Lithium: Rowe, 1954, 1955; Mulligan, 1957a, 1957b.
 Falcon Lake, General: Davies, 1954; House, 1955.
 Gold: Davies, 1954.
 Molybdenum: Springer, 1952.
 Sulphides: Davies, 1954.
 Tungsten: Springer, 1952.
 Radioactive minerals: House, 1955.
 Glenn, Lithium and Beryllium: Springer, 1952.
 Greer Lake, Beryllium: Davies, 1957a.
 Feldspar quarrying: Davies, 1957a.
 Lithium: Davies, 1957a.
 Lily Pond Area, General: Michalkow, 1954.
 Lithium Corporation of Canada: Davies, 1956b.
 Montgary Mines-Bernic Lake: Mulligan, 1957b.
 Oiseau Lake: (See Bird Lake.).
 Oiseau River: (See Bird River.).
 Rush Lake, Tin: Davies, 1955b.
 Ryerson Lake, General: Davies, 1957a.
 Shatford Lake, General: Davies, 1957a.
 Beryllium: Davies, 1957a.
 Sulphides: Davies, 1957a.
 Tin: Davies, 1957a.
 Star Lake, General: Davies, 1954.
 Sulphides: Davies, 1954.
 Uranium: Lang, 1952.
 Tulabi Lake, Garnetiferous rocks: Davies, 1956a.
 West Hawk Lake, General: Springer, 1952; Davies, 1954.
 Gold and Silver: Springer, 1952.
 Granite quarries: Springer, 1952.
 Lithium: Rowe, 1954, 1955; Mulligan, 1957a, 1957b.
 Petrology: Binda, 1953.
 Sulphides: Davies, 1954.
 Tin: Springer, 1952.
 Uranium: Springer, 1952.
 Winnipeg River, General: Davies, 1957a.
 Beryllium: Davies, 1957a.
 Fuchsite: Davies, 1957a.
 Lithium: Rowe, 1954, 1955; Davies, 1956b; Gass, 1957; Mulligan,
 1957a, 1957b.

Pegmatites: Davies, 1957c.
Sulphides: Davies, 1957a.
Uranium: Lang, 1952.
Tantalite-columbite: Davies, 1957a.

OXFORD LAKE MINING DIVISION

General: Harrison, 1951b.
Bear Lake, General: Harrison, 1951c; Milligan, 1952b; Quinn, 1955a.
Pegmatite minerals: Milligan, 1954.
California Lake, General: Moorhouse, 1954.
Eastern Bear Lake, General: Milligan, 1954.
Gold: Milligan, 1954.
Sulphides: Milligan, 1954.
Oxford House, Accessory minerals: Morgan, 1940.
Oxford Lake, General: Harrison, 1951b.
Semple Lake: Sulphides: Quinn, 1955b.
Utik Lake, General: Harrison, 1951c; Milligan, 1952b, 1953.
Copper: Quinn, 1955b.
Sulphides: Milligan, 1952b; Quinn, 1955b.
Western Bear Lake, General: Allen, 1953.
Mineralization: Allen, 1953.

RICE LAKE MINING DIVISION

General: Harrison, 1951b.
Beresford Lake, General: Russell, 1952b.
Gold: Davies, 1953.
Buffalo Lake, Copper: Precambrian, 1955b.
Clangula Lake, Soil forming processes on serpentine: Allen, 1950.
Garner Lake, General: Russell, 1952b.
Asbestos: Russell, 1952b.
Iron Formations: Russell, 1952b.
Halfway Lake, General: Russell, 1952c.
Gold: Russell, 1952c.
Jeep Mine, General: Eakins, 1949.
Kickley Lake, General: Russell, 1952b.
Diana Mine: Russell, 1952b.
Gold: Russell, 1952b.
Sulphides: Russell, 1952b.
Lake St. Martin, General: Hunter, 1951.
Lily Lake, General: Russell, 1952b.
Sulphides: Russell, 1952b.
Long Lake, General: Russell, 1952c.
Gold: Russell, 1952c.
Manigotagan Lake, General: Davies, 1951.
Uranium: Precambrian, 1955b.
Manigotagan-Rice River, Gold: Davies, 1951.
Hematite: Davies, 1951.
Ogama-Rockland Gold Mine: Troop, 1950; de Wet, 1951a, 1952.
Rice Lake (Southern), General: Davies, 1953.
Gold: Davies, 1953.

Gencona Mines: Davies, 1953.
Gold Island Mining Company: Davies, 1953.
Gold Lake Mines: Davies, 1953.
Gold Pan Mine: Davies, 1953.
Packsack Mines: Davies, 1953.
Portage Avenue Gold Mines: Davies, 1953.
San Antonio Gold Mines: de Wet, 1952.
Wanipigow Lake, Gold: Davies, 1953.

PART IV

MAPS

AEROMAGNETIC MAPS PUBLISHED BY THE MANITOBA MINES BRANCH

1951-1957

Sherridon Area: long. $100^{\circ} 52'$ - $101^{\circ} 56'$; lat. $54^{\circ} 56'$ - $55^{\circ} 18'$;
2 in. to 1 mi.

Southeast Manitoba: long. $95^{\circ} 09'$ - $95^{\circ} 58'$; lat. $49^{\circ} 00'$ - $49^{\circ} 38'$; in six
separate sheets. 2 in. to 1 mi.

GEOPHYSICAL MAPS OF MANITOBA PUBLISHED BY THE GEOLOGICAL SURVEY OF CANADA

1951-1957

Miscellaneous

- Gravity anomaly map of Manitoba, Dominion Observatories.
1 in. to 20 mi.
- 1955.0 Isogonic Chart, Manitoba - 1955.0, Dominion Observatories.
1 in. to 20 mi.

Geophysics Papers (Aeromagnetic).

- 550 G Magnetic anomaly north of Seal River, Manitoba
Lat. $59^{\circ} 00'$ - $59^{\circ} 03'$
Long. $96^{\circ} 00'$ - $96^{\circ} 17'$
- 628 G Nichol Lake, Manitoba
Lat. $58^{\circ} 30'$ - $58^{\circ} 45'$
Long. $96^{\circ} 00'$ - $96^{\circ} 30'$
- 629 G Lovat Lake, Manitoba
Lat. $58^{\circ} 30'$ - $58^{\circ} 45'$
Long. $96^{\circ} 30'$ - $97^{\circ} 00'$
- 630 G Wither Lake, Manitoba.
Lat. $58^{\circ} 45'$ - $59^{\circ} 00'$
Long. $96^{\circ} 30'$ - $97^{\circ} 00'$
- 631 G Meades Lake, Manitoba
Lat. $58^{\circ} 45'$ - $59^{\circ} 00'$
Long. $96^{\circ} 00'$ - $96^{\circ} 30'$
- 632 G Quinn Lake, Manitoba
Lat. $58^{\circ} 30'$ - $58^{\circ} 45'$
Long. $97^{\circ} 00'$ - $97^{\circ} 30'$
- 633 G Steel River, Manitoba
Lat. $58^{\circ} 45'$ - $59^{\circ} 00'$
Long. $97^{\circ} 00'$ - $97^{\circ} 30'$
- 634 G Knights Hill, Manitoba
Lat. $58^{\circ} 45'$ - $58^{\circ} 47'$
Long. $93^{\circ} 30'$ - $94^{\circ} 00'$
- 635 G Cape Churchill, Manitoba.
Lat. $58^{\circ} 45'$ - $58^{\circ} 47'$
Long. $93^{\circ} 10'$ - $93^{\circ} 30'$

636 G	Eppler Lake, Manitoba
	Lat. 58° 45' - 59° 00'
	Long. 95° 30' - 96° 00'
637 G	Howard Lake, Manitoba
	Lat. 58° 45' - 59° 00'
	Long. 95° 00' - 95° 30'
638 G	Knife Delta, Manitoba
	Lat. 58° 45' - 59° 00'
	Long. 94° 30' - 95° 00'
639 G	Churchill, Manitoba
	Lat. 58° 45' - 58° 48'
	Long. 94° 00' - 94° 30'
640 G	Button Bay, Manitoba
	Lat. 58° 30' - 58° 45'
	Long. 94° 00' - 94° 30'
641 G	Nowell Lake, Manitoba
	Lat. 58° 30' - 58° 45'
	Long. 94° 30' - 95° 00'
642 G	Langille Creek, Manitoba
	Lat. 58° 30' - 58° 45'
	Long. 95° 00' - 95° 30'
643 G	Duddles Lakes, Manitoba
	Lat. 58° 30' - 59° 45'
	Long. 95° 30' - 96° 00'
644 G	White Whale River, Manitoba
	Lat. 58° 30' - 58° 45'
	Long. 93° 00' - 93° 30'
645 G	Norton Lake, Manitoba
	Lat. 58° 30' - 58° 45'
	Long. 93° 30' - 94° 00'
646 G	Skromeda Creek, Manitoba
	Lat. 58° 15' - 58° 30'
	Long. 95° 30' - 96° 00'
647 G	Dickens Lake, Manitoba
	Lat. 58° 15' - 58° 30'
	Long. 95° 00' - 95° 30'
648 G	Lofthouse Lake, Manitoba
	Lat. 58° 15' - 58° 30'
	Long. 94° 30' - 95° 00'
649 G	Bylot, Manitoba
	Lat. 58° 15' - 58° 30'
	Long. 94° 00' - 94° 30'
650 G	Warkworth Creek, Manitoba
	Lat. 58° 15' - 58° 30'
	Long. 93° 30' - 94° 00'
651 G	Salmon Creek, Manitoba
	Lat. 58° 15' - 58° 30'
	Long. 92° 55' - 93° 30'
652 G	Paragon Lake, Manitoba
	Lat. 58° 15' - 58° 30'
	Long. 97° 00' - 97° 30'

653 G	Archer Creek, Manitoba
	Lat. 58° 15' - 58° 30'
	Long. 96° 30' - 97° 00'
654 G	Nares Lake, Manitoba
	Lat. 58° 15' - 58° 30'
	Long. 96° 00' - 96° 30'
655 G	Stanley River, Manitoba
	Lat. 58° 30' - 58° 45'
	Long. 97° 30' - 98° 00'
656 G	Dawes Lake, Manitoba
	Lat. 58° 45' - 59° 00'
	Long. 97° 30' - 98° 00'
657 G	Cromarty, Manitoba
	Lat. 58° 00' - 58° 15'
	Long. 94° 00' - 94° 30'
658 G	Red Head Rapids, Manitoba
	Lat. 58° 00' - 58° 15'
	Long. 94° 30' - 95° 00'
659 G	Wise Lake, Manitoba
	Lat. 58° 00' - 58° 15'
	Long. 95° 00' - 95° 30'
660 G	Knight Lake, Manitoba
	Lat. 58° 00' - 58° 15'
	Long. 95° 30' - 96° 00'
661 G	Condie Lake, Manitoba
	Lat. 58° 30' - 58° 45'
	Long. 96° 00' - 96° 30'
662 G	Allan Lake, Manitoba
	Lat. 58° 00' - 58° 15'
	Long. 96° 30' - 97° 00'
663 G	Broad River, Manitoba
	Lat. 58° 00' - 58° 15'
	Long. 92° 50' - 93° 00'
664 G	Kelsey Creek, Manitoba
	Lat. 58° 00' - 58° 15'
	Long. 93° 00' - 93° 30'
665 G	Fletcher Lake, Manitoba
	Lat. 58° 00' - 58° 15'
	Long. 93° 30' - 94° 00'
666 G	Stony Lake, Manitoba
	Lat. 58° 45' - 59° 00'
	Long. 98° 30' - 99° 00'
667 G	Overby Lake, Manitoba
	Lat. 58° 45' - 59° 00'
	Long. 98° 00' - 98° 30'
668 G	Blyth Lake, Manitoba
	Lat. 58° 00' - 58° 15'
	Long. 97° 00' - 97° 30'
669 G	Ryan Lake, Manitoba
	Lat. 58° 30' - 58° 45'
	Long. 98° 30' - 99° 00'

670 G Wilkie Lake, Manitoba
 Lat. $58^{\circ} 30' - 58^{\circ} 45'$
 Long. $99^{\circ} 00' - 99^{\circ} 30'$

671 G Tadoule Lake, Manitoba
 Lat. $58^{\circ} 30' - 58^{\circ} 45'$
 Long. $98^{\circ} 00' - 98^{\circ} 30'$

720 G Legary Lake, Manitoba
 Lat. $58^{\circ} 15' - 58^{\circ} 30'$
 Long. $97^{\circ} 30' - 98^{\circ} 00'$

721 G Cheyne Lakes, Manitoba
 Lat. $58^{\circ} 15' - 58^{\circ} 30'$
 Long. $99^{\circ} 00' - 99^{\circ} 30'$

722 B Kinsman Lake, Manitoba
 Lat. $58^{\circ} 15' - 58^{\circ} 30'$
 Long. $98^{\circ} 30' - 99^{\circ} 00'$

723 G Porcupine Rapids, Manitoba
 Lat. $58^{\circ} 15' - 58^{\circ} 30'$
 Long. $98^{\circ} 00' - 98^{\circ} 30'$

724 G Ashley Lake, Manitoba
 Lat. $58^{\circ} 00' - 58^{\circ} 15'$
 Long. $97^{\circ} 30' - 98^{\circ} 00'$

725 G Fox Lake, Manitoba
 Lat. $58^{\circ} 00' - 58^{\circ} 15'$
 Long. $98^{\circ} 00' - 98^{\circ} 30'$

GEOLOGICAL MAPS PUBLISHED BY THE MANITOBA MINES BRANCH

1951-1957

- Map 49-5 Lasthope Lake Area: long. $100^{\circ} 45' - 101^{\circ} 00'$;
lat. $56^{\circ} 30' - 56^{\circ} 45'$; 2 in. to 1 mi.;
by A. P. Fawley.
- Map 49-6 Long Lake - Halfway Lake Area: long. $95^{\circ} 16' - 95^{\circ} 26'$;
lat. $50^{\circ} 50' - 50^{\circ} 57'$; 1 in to 1320 ft.;
by G. A. Russell.
- Map 50-2 Manigotagan - Rice River Area: long. $96^{\circ} 15' - 96^{\circ} 30'$;
lat. $51^{\circ} 00' - 51^{\circ} 15'$; 2 in. to 1 mi.;
by J. F. Davies.
- Map 50-3 Lily Lake - Kickley Lake Area: long. $95^{\circ} 11' - 95^{\circ} 15'$;
lat. $50^{\circ} 42' - 50^{\circ} 47'$; 1 in. to 1300 ft.;
by G. A. Russell.
- Map 50-4 Mystery Lake Area: long. $97^{\circ} 37' - 97^{\circ} 50'$;
lat. $55^{\circ} 45' - 55^{\circ} 55'$; 2 in. to 1 mi.;
by J. C. Gill.
- Map 50-5 Waskaiowaka Lake Area: long. $96^{\circ} 00' - 97^{\circ} 00'$;
lat. $56^{\circ} 00' - 56^{\circ} 46'$; 1 in. to 2 mi.;
by J. C. Gill.
- Map 50-6 Rennie-West Hawk Lake Area: long. $98^{\circ} 14' - 95^{\circ} 34'$;
lat. $49^{\circ} 35' - 49^{\circ} 53'$; 1 in. to 1 mi.;
by G. D. Springer.
- Map 50-7 Laurie Lake Area: long. $101^{\circ} 45' - 102^{\circ} 00'$;
lat. $56^{\circ} 30' - 56^{\circ} 45'$; 2 in. to 1 mi.;
by G. C. Milligan.
- Map 50-8 Beau-Cache Lake Area: long. $100^{\circ} 30' - 100^{\circ} 40'$;
lat. $56^{\circ} 21' - 56^{\circ} 30'$; 2 in. to 1 mi.;
by G. C. Milligan.
- Map 50-9 Counsell Lake and Wilmot Lake Areas: long. $101^{\circ} 00' - 101^{\circ} 30'$;
lat. $56^{\circ} 30' - 56^{\circ} 45'$; 2 in. to 1 mi.;
by T. A. Oliver.
- Map 50-10 Lake St. Martin Area: Twp. 32 and 33. Rge. 7 and 8 WPM.
1 in. to 2 mi.; by H. E. Hunter.
- Map 51-3 Oiseau (Bird) River Area: long. $95^{\circ} 30' - 95^{\circ} 50'$;
lat. $50^{\circ} 20' - 50^{\circ} 30'$; 2 in. to 1 mi.;
by J. F. Davies.
- Map 51-4 Utik Lake-Bear Lake Area: long. $96^{\circ} 00' - 96^{\circ} 15'$;
lat. $55^{\circ} 03' - 55^{\circ} 20'$; 2 in. to 1 mi.;
by G. C. Milligan.
- Map 51-5 Melvin Lake Area: long. $100^{\circ} 07' 30'' - 96^{\circ} 15'$;
lat. $57^{\circ} 00' - 57^{\circ} 15'$; 2 in. to 1 mi.;
by H. E. Hunter.
- Map 52-1 Southern Rice Lake Area: Twp. 23. Rge. 5, 15 and 14 EPM.
1 in. to 800 ft.; by J. F. Davies.
- Map 52-3 Wolverine and Caribou Rivers: long. $94^{\circ} 00' - 99^{\circ} 00'$;
lat. $59^{\circ} 00' - 60^{\circ} 00'$; 1 in. to 4 mi.;
by G. A. Russell.

- Map 53-1 Eastern Bear Lake Area: long. $95^{\circ} 45' - 96^{\circ} 00'$;
lat. $55^{\circ} 00' - 55^{\circ} 20'$; 2 in. to 1 mi.;
by G. C. Milligan and W. F. Take.
- Map 53-2 Cotton Lake Area: long. $96^{\circ} 30' - 96^{\circ} 55'$;
lat. $55^{\circ} 00' - 55^{\circ} 12'$; 2 in. to 1 mi.;
by C. M. Allen.
- Map 53-3 California Lake Area: long. $95^{\circ} 30' - 95^{\circ} 45'$;
lat. $55^{\circ} 00' - 55^{\circ} 20'$; 2 in. to 1 mi.;
By M. D. Moorhouse and J. H. Shepherd.
- Map 53-4 West Hawk - Falcon Lake Area: long. $95^{\circ} 09' - 95^{\circ} 17'$;
lat. $45^{\circ} 42' - 49^{\circ} 48'$; 1 in. to 1,000 ft.;
by J. F. Davies.
- Map 54-1 Bird Lake Area: long. $95^{\circ} 20' - 95^{\circ} 30'$; lat. $50^{\circ} 25' - 50^{\circ} 30'$;
1 in. to 1,000 ft.; by J. F. Davies and C. M. Allen.
- Map 55-1 Booster Lake Area: long. $95^{\circ} 09' - 95^{\circ} 20'$;
lat. $50^{\circ} 25' - 50^{\circ} 30'$; 1 in. to 1,000 ft.;
by J. F. Davies.
- Map 55-2 MacBride Lake Area: long. $99^{\circ} 45' - 100^{\circ} 00'$;
lat. $56^{\circ} 45' - 57^{\circ} 00'$; 2 in. to 1 mi.;
by L. C. Kilburn.
- Map 55-3 Snow Lake-Herb Lake Area: long. $99^{\circ} 47' - 100^{\circ} 08'$;
lat. $54^{\circ} 45' - 54^{\circ} 58'$; 2 in. to 1 mi.;
by G. A. Russell.
- Map 56-1A Shatford Lake - Winnipeg River Area: long. $95^{\circ} 14' 30'' - 95^{\circ} 20' 00''$;
lat. $50^{\circ} 20' - 50^{\circ} 25'$; 1 in. to 1,000 ft.;
by J. F. Davies.
- Map 56-1B Ryerson Lake - Winnipeg River Area: long. $95^{\circ} 09' 00'' - 95^{\circ} 14' 30''$;
lat. $50^{\circ} 20' - 50^{\circ} 25'$; 1 in. to 1,000 ft.;
by J. F. Davies.

PRELIMINARY REPORTS AND MAPS PUBLISHED BY THE
GEOLOGICAL SURVEY OF CANADA

1951-1957

Papers

- 46 - 14 Flin Flon-Mandy Area, Manitoba and Saskatchewan,
by C. H. Stockwell.
- 51 - 4 Preliminary map, Sipiwesk, Manitoba,
by J. M. Harrison.
- 51 - 17 Preliminary map, Cranberry Portage (east half), Manitoba,
by T. Podolsky.
- 53 - 12 Uhlman Lake Map Area: by G. M. Wright.
- 54 - 13 Nelson House, Manitoba: by H. A. Quinn.
- 54 - 14 Heming Lake and Elbow Lake: by J. C. McGlynn.
- 55 - 8 Knee Lake, Manitoba: by H. A. Quinn.

Maps

- 10 - 1956 Split Lake, Manitoba: 1 in. to 4 mi.; by R. Mulligan.
- 24 - 1957 Ledge Lake Area, Manitoba and Saskatchewan;
1 in. to 1,000 ft.; by W. W. Heywood.
- 26 - 1957 Cranberry Portage (west half), Manitoba;
1 in. to 1 mi.; by T. Podolsky.

GEOLOGICAL MAPS OF MANITOBA PUBLISHED BY THE
GEOLOGICAL SURVEY OF CANADA

1951-1957

- 900 A Canada - Principal Mineral Area, Geol. Surv., Canada
1 in. to 120 mi.; (1958 - 8th edition).
- 987 A Crowduck Bay, west of Principal Meridian; lat. $54^{\circ} 40'$ - $55^{\circ} 00'$;
long. $99^{\circ} 30'$ - $99^{\circ} 45'$; 1 in. to 1 mi.; (1951).
- 1006 A Batty Lake, west of Principal Meridian; lat. $55^{\circ} 00'$ - $55^{\circ} 15'$;
long. $100^{\circ} 30'$ - $101^{\circ} 00'$; 1 in. to 1 mi.; (1951),
(with Memoir 271).
- 1016 A Reindeer Lake, Saskatchewan and Manitoba; lat. $56^{\circ} 00'$ - $58^{\circ} 00'$;
long. $100^{\circ} 00'$ - $104^{\circ} 00'$; 1 in. to 8 mi.; (1953).
- 1020 A Weldon Bay, Manitoba; lat. $54^{\circ} 45'$ - $55^{\circ} 00'$;
long. $101^{\circ} 15'$ - $101^{\circ} 30'$; 1 in. to 1 mi.; (1952).
(with Memoir 270).

APPENDIX

List of Authors - before 1950

(Omitted from Publication 51 - 1)

Allen, C. M. - 1950
Antrobus, E. S. A. - 1949
Ashton, H. F. - 1949
Black, P. T. - 1949
Coldwell, C. K. - 1950
Davies, J. F. - 1950
Dornian, N. - 1950
Eakins, P. R. - 1949
Gentleman, D. - 1945
Harrison, J. M. - 1941
Krouse, C. A. - 1950
Leveille, J. H. - 1950
McAuley, J. S. - 1950
Morgan, J. H. - 1940
Osborne, T. C. - 1949
Shepherd, J. D. - 1934
Stanton, M. S. - 1941
Taylor, W. L. W. - 1950
Troop, A. G. - 1950
Wright, J. F. - 1925

